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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,145	11/26/2003	Dattatreya Ramesh Panse	3876	9236
22474	7590	06/05/2006	EXAMINER	
DOUGHERTY CLEMENTS 1901 ROXBOROUGH ROAD SUITE 300 CHARLOTTE, NC 28211			SALVATORE, LYNDIA	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/723,145	PANSE, DATTATREYA RAMESH	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lynda M. Salvatore	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's amendment and accompanying remarks filed 03/16/06 have been fully considered and entered. Claims 1,2,7,8,10-12,15,16,20-22,24-26,29-32,35 and 36 have been amended and claims 33-34 have been canceled as requested. Applicant's amendments and/or arguments have been found persuasive to overcome the claim objections and 112 2<sup>nd</sup> paragraph rejections set forth in sections 1-6 of the last Office Action. As such, these objections/rejections are hereby withdrawn. Applicant's arguments with respect to the prior art rejections of claims 8-10,12, 22-24,26,29-32 are found persuasive. Specifically, the prior art made of record fails to teach the claimed hydrolytic stabilizer and cross-linking enhancer. However, despite this advance, Applicant's amendments are not found patently distinguishable over the prior art made of record and Applicant's arguments are not found persuasive of patentability for reasons set forth herein below.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 02/17/06 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of 10/739361 *has not been received*. The Examiner notes that Applicant has filed said disclaimer, however, it has not been recorded.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is

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appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-39 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-20 and 45-49 of copending Application No. 10/739361. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly sought subject matter is fully encompassed by 10/739361.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Claim Rejections - 35 USC § 102***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 15-16, 25, 27 and 28 stand rejected under 35 U.S.C. 102(b) as being anticipated by Morikawa et al., 6,309,507.

Applicant argues that the solvent based coatings of Morikawa et al., is not suitable for making thick coatings and cannot be extruded as a thermoplastic. This argument is not found persuasive. In response, the Examiner respectfully points out that Applicant is not claiming a

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thick coating including or excluding a solvent. Rather, Applicant is claiming an extruded adhesive laminate. To that end, the prior art of Morikawa et al., teach as the lamination method, wet lamination, dry lamination, hot-melt lamination, extrusion lamination, non-solvent lamination and the like (column 10, 24-30).

With regard to the collapsible tank limitations recited in claim 16, the recitation of “thereby forming collapsible tanks” is not considered sufficiently limiting. Applicant has not provided any limitations or features as to how an adhesive laminate “forms” a collapsible tank. In other words, it does not appear that the coated fabric spontaneously forms into a collapsible tank. It is the position of the Examiner that the recitation of “thereby forming collapsible tanks” is an intended use of the adhesive laminate. As such, since it is shown that the prior art meets all of the structure and/or chemical features of the instant invention there is nothing on record to evidence that the adhesive laminate of Morikawa et al., could not form a collapsible tank.

The patent issued to Morikawa et al., teach a polyisocyanate curing agent adhesive composition comprising a polyurethane base resin, a blocked isocyanate curing agent, and a solvent (Title, column 2, 10-40, column 9, 24-40, column 9, 53-60). Morikawa teach employing polyurethane with two pendant hydroxyl groups (column 6, 22-28). Morikawa et al., teach polydiisocyanates or uretidione bond containing polyisocyanates (column 5, 65-column 6, 10). Morikawa et al., teach the claimed uretidione compounds (column 2, 15-40). Morikawa et al., teach the use of carbodiimide (column 2, 32). Morikawa et al., teach that the aromatic diisocyanate may be used singly or admixture of two kinds (column 2, 30-45). As such, the Examiner considers a curing agent mixture comprising a blocked isocyanate such as those set forth above and carbodiimide sufficient to meet the limitation of further providing a hydrolytic

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stabilizer. In other words, the Examiner considers carbodiimide sufficient to meet the limitation of hydrolytic stabilizer. Morikawa et al., teach various suitable solvents such the claimed ketones, ethers, and esters (column 9,24-41). Morikawa et al., teach that the polyurethane curing adhesive is suitable is useful on a variety of substrates including non-woven fabrics (column 9, 60-65).

With specific regard to the manipulative method steps, processing conditions and apparatus recited in claim 16, it is the position of the Examiner that said limitations are not germane to the final product. The presence of process limitations on product claims in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656

Although produced by a different process, the claimed product appears to be the same or similar to the product provided by the combination of prior art. As such, the burden shifts to Applicant to come forward with evidence establishing an obvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,292.

***Claim Rejections - 35 USC § 103***

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-7, 11,13-14,17-21 and 35-38 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ohya et al., US 4,567,090 in view of Morikawa et al., 6,309,507.

Applicant argues that claim 1 has been amended to explicitly claim the number of layers and that the claim language of claim 1 is implicitly solventless. Applicant submits that uretdione is explicitly claimed and that while the prior art of Morikawa et al., disclose uretdione, they are

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only used in the context of reactive polyisocyanates and they are consumed during preparation of the curing agent. Applicant argues that the prior art of Morikawa et al., does not teach that uretdiones can be used as blocked isocyanates in a solventless composition. These arguments are not found persuasive.

With regard to Applicant's arguments that claim 1 now explicitly recites the number of layers in the adhesive laminate, it is respectfully pointed out that Applicant merely recites the layers of the adhesive laminate. Applicant's open claim language of comprising does not exclude additional layers.

With regard to Applicant's argument that the prior art of Morikawa et al., does not teach uretdiones that can be used as blocked isocyanates in a solventless composition, it is respectfully pointed out that Applicant is not claiming a blocked isocyanate or a solventless composition. Thus, Applicant's arguments are not commensurate in scope with the claimed subject matter.

With regard to Applicant's comment that claim 1 is implicitly solventless, the Examiner asserts that only explicit not implicit limitations are considered. If having a solventless composition is critical to the novelty of the instant invention, then it is suggested that Applicant positively recite such features and/or limitations. Absent such limitations, the Examiner maintains that the combination of prior art set forth above renders the rejected claims obvious.

The Examiner maintains the arguments made above with respect to the "thereby forming collapsible tanks" recitation.

The patent issued to Ohya et al., teach a heat resistant laminate film comprising two adjacent layers of adhesive (column 2, 5-10). The first adhesive layer (B) comprises a polyolefin resin modified by acid and the second adhesive layer (C) is a thermoplastic polyurethane

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adhesive agent (Column 2, 10-15). Said laminate is formed by coextrusion (column 4, 23-30).

Said laminate is suitable for use in food packaging (column 1, 15-20). Ohya et al., teach that the heat resistant film laminate exhibits excellent gas-barrier and adhesive properties and the capability of enduring retort treatment at high temperatures.

Ohya et al., fail to teach the claimed adhesive composition, however, the patent issued to Morikawa et al., teach a polyisocyanate curing agent adhesive composition comprising a polyurethane base resin, a blocked isocyanate curing agent, and a solvent (Title, column 2, 10-40, column 9, 24-40, column 9, 53-60). With regard to claim 3, Morikawa teach employing polyurethane with two pendant hydroxyl groups (column 6, 22-28). With regard to claim 6, Morikawa et al., teach poly-diisocyanates or uretidione bond containing polyisocyanates (column 5, 65-column 6, 10). With regard to claim 7, Morikawa et al., teach the claimed uretidione compounds (column 2, 15-40). With regard to claims 11-12, Morikawa et al., teach the use of carbodiimide (column 2, 32). Morikawa et al., teach that the aromatic diisocyanate may be used singly or admixture of two kinds (column 2, 30-45). As such, the Examiner considers a curing agent mixture comprising a blocked isocyanate such as those set forth above and carbodiimide sufficient to meet the limitation of further providing a hydrolytic stabilizer. In other words, the Examiner considers carbodiimide sufficient to meet the limitation of hydrolytic stabilizer. With regard to claims 13-14, Morikawa et al., teach adding various additives such those recited (column 9, 10-22). Said adhesive composition is suitable for use in packaging applications (column 1, 10-20). Said adhesive composition can be applied by extrusion lamination (column 10, 25-30). Said adhesive composition exhibits excellent heat resistance and durability (column 1, 45-50).



Therefore, motivated by the desire to provide a heat resistant laminate film with excellent heat resistance and durability, it would have been obvious to one having ordinary skill in the art to form the heat resistant laminate taught by Ohya et al., US 4,567,090 with the polyisocyanate curing agent adhesive composition taught by Morikawa et al.

With regard to the fabric limitation recited in claim 1, Morikawa et al., teach that the polyurethane curing adhesive is suitable is useful on a variety of substrates including non-woven fabrics (column 9, 60-65).

Therefore, motivated by the desire to expand the number of applications of the heat resistant film laminate, it would have been obvious to laminate the heat resistant laminate taught by the combination of Ohya et al., in view of Morikawa et al. to a non-woven fabric as taught by Morikawa et al.

With specific regard to the manipulative method steps, processing conditions and apparatus recited in claims 1,2, 35 and 36, it is the position of the Examiner that said limitations are not germane to the final product. The presence of process limitations on product claims in which the product does not otherwise patentably distinguish over the prior art, cannot impart patentability to the product. *In re Stephens*, 145 USPQ 656

Although produced by a different process, the claimed product appears to be the same or similar to the product provided by the combination of prior art. As such, the burden shifts to Applicant to come forward with evidence establishing an obvious difference between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,292.

With regard to claims 5 and 19-21, the combination of prior art is silent with respect to the degree of crystallinity of the polyurethane resin, however, it is the position of the Examiner

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that the claimed level of crystallinity is inherent to the polyurethane resin taught by the prior art.

Support for said presumption is found in the use of like materials such as polyurethane having hydroxyl groups, which would result in the claimed medium to high level of crystallinity.

With regard to claims 37 and 38, the combination of prior art does not teach the performance of the seams formed after heating, however, it is reasonable to expect that the claimed acceptable seam performance would be present in the heat resistant laminate formed by the combination of prior art. Support for said argument is found in the use of like materials such as heat resistant film laminate comprising adhesive polyurethane having pendant hydroxyl groups, polyurethane adhesive and fabric and like processes such as extrusion lamination.

***Claim Rejections - 35 USC § 102/103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claim 39 stands rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morikawa et al., 6,309,507 as applied to claim 16 above.

With regard to claim 39, Morikawa et al., does not teach the performance of the seams formed after heating, however, it is reasonable to expect that the claimed acceptable seam performance would be inherent to heat resistant laminate formed by Morikawa et al. Support for said argument is found in the use of like materials such as adhesive polyurethane having pendant hydroxyl groups and fabric and like processes such as extrusion lamination, which would result in the claimed acceptable seam performance. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594

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In addition, the presently claimed acceptable seam performance would obviously have been present once the Morikawa adhesive is provided. *In re Best*, 195 USPQ 433

***Conclusion***

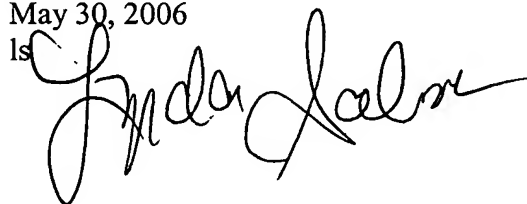
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

May 30, 2006

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A handwritten signature in black ink, appearing to read "Lynda Salvatore", written over the typed name "Lynda Salvatore".